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# Library Analytics: Shaping the Future — Call it What You Want

## When Developing Your Book Collection “Your Outcomes are Only as Good as The Data You Feed It”

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Not long ago, I was sitting with some colleagues speaking with the acquisitions staff of a major research library and we asked them if they used an Approval Plan. They assured us they did not. I was quite confused because the analytics in front of me told a very different story. We pressed back asking how they managed which titles went into their DDA pools and which titles they would evaluate for firm orders and such, and the head of acquisitions replied, “our profiles handle all of that.” Lo and behold the moment we threw out the terminology and the connotations that went along with it we were speaking the same language. Whether you call it an Approval Plan or a Profile, the core is the same: it is a decision engine based off enhanced metadata. And when talking about **GOBI** Approval Plans that is exactly what we are speaking about — a nuanced decision engine that is working from a detailed logic tree and driven by enhanced proprietary metadata generated by **GOBI Library Solutions** Profilers.

### The Data

At **GOBI** it all starts with the data, and the richest data is the enhanced title level metadata generated by the Profilers. To understand the impact of this data, it is important to understand where it is coming from and who is generating it. This is not a simple cataloging process, although Bibliographers and Catalogers are creating a base layer of data. Subject matter experts (whom we call Profilers) sit with book in hand (or nowadays, book on screen) and mark up metadata enhancements. These subject matter experts have spent on average 16 years assessing content in their subject specific domains. Since **GOBI** profiles more than 1,400 imprints (65,000+ titles annually) from the major and minor academic presses, each subject matter expert has seen tens of thousands of titles pass their desk and are using those experiences to determine which metadata facets to apply to each title. For clarity, when I say “facets,” I am speaking specifically about the additional metadata enhancements that are generated from the subject matter experts and **GOBI**’s proprietary data.

When you have subject matter experts of this level in their respective domains, you can mine richer and more granular data to provide deeper connections, helpful context and evaluative guidance. The Profilers identify connections across disciplines and get to the core of what

a title clearly and compellingly addresses. For example, cataloging a title might correctly place the title within the **Library of Congress** subclass HM621, which tells us it is a sociology title about culture, but Profilers can tell you that the title is most particularly about communications and mass media, that it is best suited for advanced academic use and that the author is faculty at **Gonzaga University**, among many other added facets. Because of this level of granularity, the Profilers are constantly addressing the structure and rules around each of the facets and a thorough review process is implemented before any new facet is added. Later this year, we will be introducing two new facets, disabilities studies and poverty studies; each of the new facets was rigorously evaluated and discussed as to how and in which situations it would be applied internally among the Profilers. In addition to intensive internal discussion, there was significant outreach to our partner libraries, via our Collection Development Managers, to gather their feedback about how new facet should be worded and applied. These two upcoming facets are part of an ongoing effort to further augment **GOBI** diverse content indicators.

In addition to descriptive facets, having domain experts with decades of experience allows the Profilers to assess the titles they are profiling and add certain quality and audience indicators. **GOBI** Select levels speak specifically to high-quality materials on important topics in specific subject areas. The Select levels delineate between basic materials which are accessible to all academic readers and research materials which are better suited to a more advanced upper level scholarly audience. In addition to the Select levels, each month the Profilers determine the very best titles in their expert domains which they profiled that month and those titles become **GOBI** Essential titles. Fewer than five percent of all titles profiled are assigned this designation, as these are the very best titles our subject matter experts are seeing. The recommendation is that any institution with a curriculum on that given subject should be collecting these essential texts.

### The Decision Engine

Why does the quality and depth of metadata matter? If you’re like most libraries, you’re balancing various acquisition models that

include outright purchasing and perhaps several usage-based models. And instead of dozens of bibliographers on staff to make these decisions, you can rely on a sophisticated decision engine

to help allocate newly published titles into one of your acquisition or access models, such as DDA, or purchase of a DRM-free unlimited user copy. With any decision engine, your

*“Whether you call it an Approval Plan or a Profile, the core is the same: it is a decision engine based off enhanced metadata.”*

outcomes are only as good as the data you feed it and using the enhanced metadata from the Profilers ensures the best, most accurate outcomes from the decision engine. When we are using subject headings, interdisciplinary terms, geographic descriptors or any of the hundreds of other descriptive data points, we know the title in question is clearly and compellingly about said descriptor. When we are talking about format types, edition types and literary types, we know that the Profiler has seen thousands of these and can clearly and compellingly identify that the title in hand is a new edition of a non-fiction revised dissertation or a bible commentary concordance that is part of an unnumbered series or a reprint of 2005 edition personal narrative. We know when they are making affiliations to the country of origin of the work or the faculty affiliations of the authors they are basing it off of compelling evidence. It is these facets that allow the decision engine that is the **GOBI** Approval Plan to function at a level that is singular in the academic acquisitions space and why the majority of libraries identify **GOBI** as their primary monograph acquisitions tool — almost 70 percent of print acquisition and almost 90 percent of eBook acquisitions according to a recent study (<https://sr.ithaka.org/publications/2019-report-library-acquisition-patterns/>). The report, conducted by a nonprofit research group **Ithaka S+R**, evaluated the acquisition trends of 124 U.S. academic institutions. The impetus of the study was to evaluate the impact of **Amazon** on academic institutional monograph acquisitions. **Amazon** did come in second for print book acquisition (11% of total print acquisition) and had no eBook presence. The take away from **Ithaka S+R** was: “**GOBI Library Solutions** is the dominant vendor of both print and eBooks within our sample.

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**Amazon** is the second largest print book vendor but trails by a wide margin and has no meaningful presence in the eBook market.”<sup>1</sup>

Another element of the approval process is the ability of the approval logic to go beyond interrogating the book’s profile and the library plan to consider key decision points identified by the library. Profile Decision Support questions allow the approval output for a title to be based on data that can only be discerned through careful examination of the text. These are incredibly granular questions outside the scope of the typical metadata enhancements. At the end of the profiling process, based on the data imputed and the parameters in the library’s Approval Plan, questions can be prompted to the Profiler to ensure the output of the approval process is accurate. The range and scope of those questions are incredibly varied. Some examples of the types of questions that are part of the Profile Decision Support process are: *might the book be offensive to Muslim culture or does the book depict the human form in a manner offensive to Muslim culture?* You can see why these questions could be very relevant to a library from the Middle East and why the title is kicked into the non-match output if those questions are answered in the affirmative. Another example: *is the title content significant such as a full chapter about Yellowstone National Park or the greater Yellowstone Ecosystem or Wildlife corridors in the Western U.S. or fur trade in the West?* Again, depending on how and what your collection mandates, these are incredibly relevant, valuable questions that are uniquely able to be answered by **GOBI’s** Profilers.

Another key part of knowing what to collect is knowing what an institution already has access to or owns and in which format and model. An important feature of **GOBI**, which significantly impacts our decision engine and title recommendations, is the duplication control and linking that takes place on **GOBI’s** backend. Because **GOBI** knows what you have acquired or have access to via **GOBI** — from outright acquisitions to DDA pools, eCollections or Evidence-Based Acquisition packages — in addition to what you’ve acquired or accessed outside of **GOBI** (via a holdings load), **GOBI** is able to map your existing holdings and available titles to the 16+ million titles in **GOBI’s** database and ensure you know when you are acquiring a title if it is unique to your institution. **GOBI’s** robust linking of formats (from print to eBooks) and across vendors and suppliers, ensures that libraries get the books they want in their preferred format and acquisition method.

### Bringing it All Together

Since we have the detailed acquisitions plan, the subsequent Profiling Decision Support questions, the full holdings view

to ensure deduplication control and title linking and, most importantly, the enhanced metadata, we can use this combination of data points to drive our decision engines outputs. There are four main categories of outputs: Notification, Standing Order, DDA and Non-Match, each of which comes with numerous permutations. It is this combination of data (the library’s acquisitions plan + Profiling Decision Support questions + deduplication/ title linking + enhanced metadata) and the subsequent decision engine output that we at **GOBI** are speaking about when we refer to Approval Plans.

Let’s look briefly into one of the outputs, Standing Orders. It seems straightforward but there are a significant number of actions that go into this process. First, the title and associated metadata needs to match all the parameters the institution has laid out for a title to trigger a Standing Order, including duplication control across all formats and access models that you have acquired. Once the content has been identified as a proper fit for a Standing Order, the acquisition ring-down is implemented: *do you prefer Print or E? If Print Cloth or Paper, what types of labeling and customization is preferred? If it’s an eBook, which model — 1 User, 3 User, Concurrent Access Model or Nonlinear Lending, DRM-Free Unlimited Users? Is it aggregator or publisher-direct preferred?* Etc. This is the process that each of the decision outputs goes through before your institution acquires a new title via Standing Order, before a notification about a title is sent, or before a discovery record for your DDA or STL pool is loaded. The same process exists for non-matches; the only difference is that non-matches are captured and stored to be reviewed later to help refine and evolve the approval parameters.

Given the hidden complexity behind a “simple” Standing Order output, it is no wonder the utility of the Approval Plan is even greater for DDA and usage-based models. In fact, providing support for usage-based acquisition or “just-in-time” access is one of the strengths of a modern Approval Plan. **GOBI** has well over one million ISBNs available for DDA, but, of course, can provide a curated pool of titles to prevent your library from acquiring a hundred titles about bananas, like what happened to the **University of Colorado** when an instructor gave his class instructions to research the production of bananas in Central America. All 150 undergraduate students dove into the **University of Colorado** catalog and caused the usage-based budget for the month to triple based primarily on acquisitions of titles about Central Amer-

ican Bananas, (<https://pdfs.semanticscholar.org/b2c8/90f5231418f1ee5a19d344918e-a00ed61764.pdf>).<sup>2</sup> How do you go from one

million to a curated pool? It is via the Approval Plan that you can maintain a curated comprehensive pool without having to dominate your collection development staff’s time. Titles are profiled as they are added to **GOBI**,

and at the same time that the matches are sent to your DDA pool, your pool is systematically reviewed to make sure none of the titles currently in the pool are breaking any of your approval settings. For example, if you set a price cap on your DDA pool and a title increases in price after it has been in your pool, that title will systematically get picked up and removed because it no longer fits the collection development parameters you set. Another way this can work is if you want to acquire titles in education from a select group of core publishers to support most undergraduate education class research needs — you can easily accomplish that via standing orders and/or notifications. You can then place advanced academic titles and research recommended titles in a DDA pool with certain parameters so that you’re making sure researchers and graduate students with additional needs can be supported seamlessly without anything blocking access for the student.

### Back to the Data

**GOBI** follows a simple yet powerful premise, “we are only as good as our data.” Everything comes out of that premise, from the decision engine outputs of the Approval Plan, to the title linking, to the series and awards ordering — everything is driven off and buttressed by the data. With the enhancements done by the subject matter experts, the decades of acquisitions data and title linking, the more than 25 platform partnerships, the one million plus ISBNs loaded each year, **GOBI** has the best, most detailed data available. Whether we use the term Approval Plans, profiles, acquisitions analytics or smart acquiring, **GOBI’s** ability to provide the richest source of data is the secret sauce that makes Approval Plans and smart acquisition not just possible but sustainable, scalable and successful. 🌱

### Endnotes

1. Daniel, Katherine, et al. “Library Acquisition Patterns.” *Ithaka S+R*, Ithaka S+R, 29 Jan. 2019, [sr.ithaka.org/publications/2019-report-library-acquisition-patterns/](http://sr.ithaka.org/publications/2019-report-library-acquisition-patterns/).
2. Wiersma, Gabrielle, and Yem Fong. “Patron-Driven E-Book Solutions: Moving Beyond the Banana Books Incident.” *Purdue e-Pubs*, Charleston Library Conference, 25 Sept. 2012, [pdfs.semanticscholar.org/b2c8/90f5231418f1ee5a19d344918e-a00ed61764.pdf](https://pdfs.semanticscholar.org/b2c8/90f5231418f1ee5a19d344918e-a00ed61764.pdf).